ABSTRACT OF THE DISCLOSURE

A nitrogen-doped n-type SiC-formed material consisting of high purity β-type crystals, which exhibits low resistivity and low light transmittance and is suitably used as a substrate for semiconductor fabricating devices, and a method of manufacturing the SiC-formed material by which the SiC-formed material is obtained at high productivity and improved deposition rate. The SiC-formed material is produced by the CVD method introducing nitrogen gas together with raw material gases and a carrier gas to form a SiC film on a substrate, and removing the substrate. The material has a specific gravity of 3.15 or more, light transmittance of 1.1 to 0.05%, and resistivity of $3x10^{-3}$ to 10^{-5} Ωm. The SiC-formed material is manufactured under conditions of the raw material gas concentration, in terms of the ratio of the raw material flow rate (l/min) to the carrier gas flow rate (l/min), introduced into the CVD reaction chamber, of 5-15 vol%, the nitrogen gas concentration, in terms of the ratio of the nitrogen gas flow rate (l/min) to the raw material gas flow rate (l/min), of 10-120 vol%, and the raw material gas retardation time of 7-110 seconds, wherein, the raw material gas retardation time (sec) = {(Effective reaction volume in the reaction chamber (l))/(raw material gas flow rate (l/min))}x{(273+20)/(273 + Reaction temperature (°C))}×60